

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in this application:

**LISTING OF THE CLAIMS:**

1-14. (Canceled).

15. (Currently Amended) A press-fit diode, comprising:

a head wire;

a base;

a chip connected via solder layers to the head wire and to the base; ~~and~~

at least a first bevel located at a top of a housing and a second bevel located at a bottom of the housing, wherein the first and second bevels enable press-fitting of the diode;  
and

a plastic sheathing which includes a sleeve and is situated at least in an area ~~[[of]]~~  
around the chip and forms a mechanical connection between the base and the head wire,  
wherein the base at least partially encloses the plastic sheathing and forms ~~[[a]]~~ the housing  
with the plastic sheathing, and wherein the base includes at least one undercut which extends  
into the plastic sheathing, and wherein a ~~[[gap]]~~ trench is provided between the sleeve of the  
plastic sheathing and the base.

16. (Currently Amended) The press-fit diode as recited in claim 15, wherein ~~one of the housing and~~ the base is made of at least one of an electrically conductive material and thermally conductive material.

17. (Currently Amended) The press-fit diode as recited in claim 16, wherein ~~[[the]]~~ a height of the base is selected to be between 0.5 mm to 0.8 mm to achieve an adequate clamping of the base and the head wire.

18. (Currently Amended) The press-fit diode as recited in claim 17, wherein the ~~housing has one of bevels and lead-in chamfers which~~ enable the diode to be pressed into a rectifier.

19. (Currently Amended) The press-fit diode as recited in claim 17, wherein the plastic sheathing in the area ~~[[of]]~~ around the chip ~~includes at least one sleeve and one~~ is made up of an area filled with a casting compound.

20. (Currently Amended) The press-fit diode as recited in claim 17, wherein ~~[[a]]~~ the trench ~~having~~ has a predetermined depth and is provided between the sleeve and an outer area of the base.

21. (Currently Amended) The press-fit diode as recited in claim 20, wherein the trench has a width which is approximately ~~0.5~~ 0.1 mm in at least one area of the trench.

22. (Previously Presented) The press-fit diode as recited in claim 21, wherein the width of the trench is essentially uniform over the entire depth of the trench.

23. (Previously Presented) The press-fit diode as recited in claim 21, wherein the width of the trench is variable over the depth of the trench.

24. (Previously Presented) The press-fit diode as recited in claim 17, wherein the base includes an outer region having a first area with a first inner diameter and a second area with a second inner diameter smaller than the first inner diameter.

25. (Canceled).

26. (New) The press-fit diode as recited in claim 15, wherein the housing is made of at least one of an electrically conductive material and thermally conductive material.